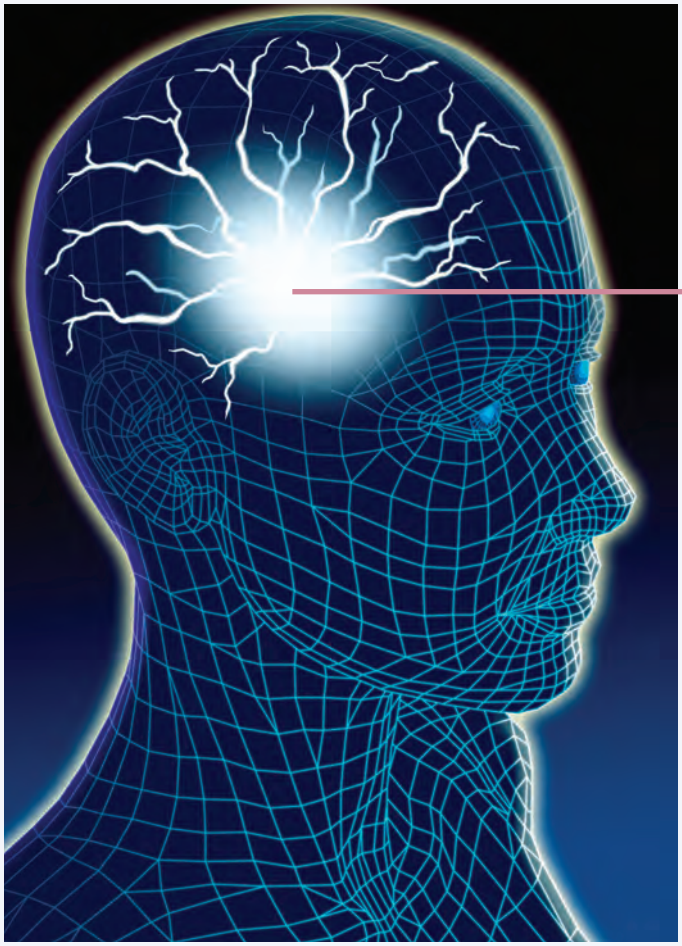
New Stroke Care System

Coming Soon...

By Bruce E. Haynes, MD



A new system of stroke care for patients with acute stroke symptoms is on the verge of starting in San Diego. This system will help assure patients with acute stroke receive rapid, appropriate care. Physicians are an integral part of this new effort, and this article outlines changes you may see in hospitals, and enlists your support for the system.

In 2005, The Board of Supervisors directed the Health and Human Services Agency (HHSA) to look at ways to improve stroke care in the county. As a result, a Stroke Task Force was formed to address this issue. The Task Force divided the approach to the solution into an educational component and an examination of care component.

The education component developed a media program to educate the public about stroke symptoms and encourage individuals with stroke symptoms to seek care rapidly. This has been used in a number of low cost media and is available.

The next phase and the second component identified by the task force to improve stroke outcomes in the county will focus on acute stroke care. This will seek to assure the identification of acute stroke patients in the field by paramedics, and transporting patients to hospitals with procedures in place to rapidly assess and treat acute stroke. The guidelines are modeled on the criteria for hospital certification as a Primary Stroke Center by the Joint Commission. HHSA's Emergency Medical Services developed the criteria in concert with the Stroke Task Force. The criteria will be implemented in the summer of 2008.

Patients with symptoms of an acute stroke starting in the previous three hours will be transported to hospitals that either are certified as Primary Stroke Centers, or are surveyed by the Emergency Medical Services and found to meet similar criteria in the county policy.

Hospitals are required to have staff to coordinate stroke care activities, with appropriate input from neurologists and other members of the medical staff. A team will respond to acute stroke patients, using protocols to deliver rapid, evidence-based care. The facility will obtain CT head scans rapidly, to facilitate use of thrombolytic therapy using Tissue plasminogen activator (tPA), if indicated.

Just as important, care pathways will encourage use of important measures, such as swallowing tests before oral intake, cardiac rhythm monitoring, blood pressure monitoring and treatment, and others. Similar protocols already exist in many or most of local hospital facilities.

An important component will be performance measures for stroke care, accompanied by a quality improvement system to improve use of important care measures. A patient registry will facilitate this. Early measures will mirror those recommended by the American Stroke Association. These include deep vein thrombosis prophylaxis for admitted patients, patients discharged on antithrombotics, those with atrial fibrillation receiving anticoagulation therapy, and thrombolytic therapy considered for administration when the patient arrived. Other standardized measures considered important are antithrombotic medication within 48 hours of hospitalization, a lipid profile obtained during hospitalization and discharge on cholesterol reducing medication, the screen for dysphagia, stroke education, smoking cessation, and consideration of a plan for rehabilitation. Local providers should check with their respective hospital to understand the measures in effect.

The program's goal is to help assure that patients with acute stroke receive rapid, coordinated, and currently accepted care to lower mortality and reduce disability from stroke. Physicians will play the key role in achieving these goals. Medical staff members are encouraged to check with their facilities about implementation plans for this stroke care initiative.

Hospital surveys will be disseminated in early summer, with system implementation beginning sometime during the summer of 2008. Please contact Bruce Haynes, MD, medical director of the HHSA Emergency Medical Services, at (619) 285-6429 if you have questions or comments.

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San Diego County Health Statistics

- In 2004, there were 1,423 deaths due to stroke in San Diego County, with almost 90 percent among residents ages 65 and older. Of the total deaths, 1,087 were white and 863 were female. (1)
- In 2004, among San Diego County residents, the rate of stroke death was 53 percent higher for females than for males (57.1, 37.3 per 100,000), while the 2005 rates for stroke hospitalizations was only 15 percent higher for females than for males (224.6, 196.1 per 100,000). (1)

To request additional health statistics describing health behaviors, diseases, and injuries for specific populations, health trends, and comparisons to national targets, please call the county's Community Health Statistics Unit at (619) 285-6479. To access the latest data and data links, including the Regional Community Profiles document, go to www.sdhealthstatistics.com.

RESOURCES:

1) Community Health Statistics Unit online Community Profiles: Death Statistical Master Files (CA DHS), County of San Diego, Health & Human Services Agency, Community Epidemiology; SANDAG, Current Population Estimates, 9/27/2006.

STEMI Receiving System Update

You may be interested in an update on the STEMI receiving system that began in January 2007. In this effort, paramedics obtain a 12-lead EKG in the field on patients who appear to be experiencing a myocardial infarction. If the EKG shows an acute myocardial infarction, designated on the EKG as ***Acute MI*** or similar interpretation, the patient is transported to a hospital identified as a "STEMI Receiving Center," a facility that offers emergent cardiac catheterization and angioplasty/stent placement.

In the first year, 330 STEMI patients had a "field activation," or notification and response of the cardiologist and catheterization laboratory personnel before the patient arrived in the hospital, and underwent an angioplasty or stent placement. The median door-to-balloon time in these patients was 62 minutes. This is well below the door to balloon times reported before the STEMI system. The rapid door to balloon time should translate into lower mortality and improved outcomes among STEMI patients. The County of San Diego would like to thank all of the physicians who have been so dedicated to providing these low door-to-balloon times.